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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,034	12/22/2004	Yoshikazu Takashima	275871US6PCT	6992

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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TOPGYAL, GELEK W

ART UNIT	PAPER NUMBER
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2621

NOTIFICATION DATE	DELIVERY MODE
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04/05/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/519,034	TAKASHIMA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	GELEK TOPGYAL	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22, 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22, 24 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/24/2009 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-22 and 24-25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-22, and 24-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US 6,922,521) in view of Jung et al. (US 2004/0076402)

**Regarding claims 1, 21-22 and 24-25**, Okada et al. teaches an information processing apparatus for recording an AV stream to a recording medium, said

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information processing apparatus comprising: controlling means for controlling the generation of said AV stream by said generating means (col. 7, lines 25-33 teaches of AV files); and recording means for recording to said recording medium said AV stream generated by said generating means (col. 7, lines 25-33 teaches of AV files); wherein said AV stream is constituted by data blocks making up predetermined units (col. 11, lines 22-43 teaches of VOBs and VOBUs); and wherein said controlling means controls parameters for said AV stream generated by said generating means as well as a layout of said data blocks, in accordance with information indicative of reproducing characteristics in effect when said AV stream recorded on said recording medium is reproduced therefrom (Figures 11-16 shows the structure of PGCI which defines a layout of the VOBs and VOBUs for reproduction).

Although the system of Okada implements the plurality of reproduction paths on a DVD standard, it does not particularly teach the means for generating said AV stream constituting each of a plurality of reproduction paths, each reproduction path including a plurality of AV segments on a timeline, every reproduction path on the recording medium including at least one AV segment not included in any other of the plurality of reproduction paths.

In an analogous DVD standard art, Jung et al. teaches in paragraphs 9-11 and Figures 4-7 of an AV stream that constitutes a plurality of reproduction paths. The plurality of reproductions that make up the AV stream is met by the plurality of angle data stored in the multi-angle portion. The plurality of reproduction paths therefore

consists of at least one AV segment (the multi-angle data) that is unique to that particular reproduction path.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the multi-angle storage capability of the DVD standard as taught by Jung et al. (albeit its discussed in the prior art section) into the system of Okada so that a user can view a particular scene from multiple angles.

As to claim 25, it should be noted that similarly, a first section of a first reproduction path in Jung can be the same as a second reproduction path e.g., the first five minutes of a video program maybe identical up to the section of the AV stream where the multi-angle data presents itself, therefore, the start and end times for that portion of the video program is identical in both reproduction paths.

**Regarding claim 2**, Okada teaches the claimed wherein said information indicative of said reproducing characteristics denotes relations between jump distances between said data blocks recorded in separate locations on the hand, and jump times corresponding respectively to said jump distances on the other hand, for use during reproduction of said AV stream in keeping with said reproduction paths (Fig. 12, includes a plurality of Start and End times in each "Cell I" information, the End time of a first and the Start time of the following Cell I information creates a jump in the data blocks during reproduction).

**Regarding claim 3**, Okada teaches the claimed as discussed in claim 1 above, however, does not particularly teach wherein said parameters for said AV stream includes a "rate" of said AV stream. It is well known and old in the art for video recorded

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on optical disks to include rate information so that reading/writing operations can be completed by calculating the location or setting a rate for playback.

Therefore, Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include rate information of an AV stream so that an AV stream recorded on an optical disk can be played successfully.

**Claims 4 and 7** are rejected for the same reasons as discussed in claim 1 above since the PGCI information are recorded onto the recording medium and are subsequently used for reproduction of the AV stream.

**Regarding claims 5-6**, Okada teaches the claimed as discussed in claim 1 and furthermore, the AV stream's data is stored in the format of MPEG using VOBs and VOBUs as a finite block of information. The PGCI includes Cells that determines a logical order in which the AV stream is reproduced. Furthermore, during reproduction, the PGCI is used to determine which VOB/VOBU is to be reproduced. As to claim 6, the broadly claimed "parameter" to be given priority can range from the selection of playback (Col. 18, lines 1+) or the mere action of choosing to create a user defined PGCI, wherein only a selected area of the video is to be used for reproduction.

**Regarding claim 8**, Okada teaches in col. 18, lines 1+ of the ability to reproduce the video stored on the recording medium according to the PGCI.

**Regarding claims 9 and 15**, Okada teaches the claimed wherein said controlling means generates first management information which includes map information for indicating locations of starting points of said AV stream on each of said reproduction paths as well as locations of entry points of the AV streams and which is

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used to control AV stream status (Fig. 12, includes a plurality of Start and End times in each "Cell I" information, the End time of a first and the Start time of the following Cell I information creates a jump in the data blocks during reproduction), said controlling means further generating second management information which includes designation information for designating a starting point and an end point of each of said AV streams and for designating the AV stream for each of said reproduction paths and which is used for reproduction management (Fig. 12, includes a plurality of Start and End times in each "Cell I" information, the End time of a first and the Start time of the following Cell I information creates a jump in the data blocks during reproduction); and wherein said recording means further records said first management information and said second management information to said recording medium (col. 7, lines 35-41 teaches the all the PGCI information are recorded on the recording medium).

**Regarding claims 10 and 16,** Okada teaches the claimed wherein said generating means encodes said AV stream in such a manner that said AV stream concludes within each of segments delimited by said change points (Fig. 12, the PGCI information is delimited by a plurality of "Cell I" sections); and wherein said controlling means creates a correspondence table describing relations of correspondence between presentation timestamps of said entry points on the one hand and packet numbers on the other hand (col. 10, lines 51+ and col. 11, lines 11-21 teaches of T map information that is used to find the location of the data on the recording medium).

**Regarding claims 11 and 17-18**, Okada teaches the claimed in col. 11, lines 22-42 of VOBs/VOBUs. Essentially the VOB/VOBUs consist of at least one GOP as per the MPEG standard.

**Regarding claims 12, 13 and 19**, Okada teaches in col. 17, lines 14+ that an MPEG transport stream is recorded onto the recording medium and is used to generate the management information of D\_VOB. Therefore, the D\_VOB's ID (D\_VOB\_ID in col. 22-32) is in direct relation to the MPEG transport stream.

**Regarding claim 14**, Okada teaches that during the recording procedure, the "random access indicator" is used to determine a start and facilitates the encoding of a new VOB. Therefore, these points in the video are locations where a reproduction path is switchable.

**Regarding claim 20**, as discussed above Okada teaches a T map that is created.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GELEK TOPGYAL whose telephone number is (571)272-8891. The examiner can normally be reached on 8:30am -5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gelek Topgyal/  
Examiner, Art Unit 2621

/JAMIE JO ATALA/  
Primary Examiner, Art Unit 2621